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09/013,490	01/26/1998	ALEXANDER S. TUZHILIN	2011/13	3399

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EXAMINER
WINDER, PATRICE L

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2155	26

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/013,490	Applicant(s) TUZHILIN ET AL.	
	Examiner Patrice L Winder	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 August 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *38,39,41-59 and 61-88* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *38,39, 41-59, 61-88* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 38-39, 41-43, 50-59, 61-63, 70-88 are rejected under 35 U.S.C. 102(e) as being anticipated by Greenblatt et al., U.S. Patent No. 5,809,238 (hereafter referred to as Greenblatt).

Regarding claim 38, Greenblatt taught an apparatus for monitoring information on a network (col. 4, lines 8-11), comprising:

a storage device storing a predefined criterion (rule table 34), and having a monitoring module thereon (rule processor 37); and

a processing device executing the monitoring module to transmit at least one instruction to the network (probes 16, 18), the at least one instruction being executed on the network and requesting a performance of a monitoring operation to monitor the

information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (col. 6, lines 8-18)

wherein the information includes at least one event which is used for detecting a change on the network (col. 10, lines 36-44).

Regarding dependent claim 39, Greenblatt taught the processing device provides the at least one result to at least one user (col. 6, lines 8-18).

Regarding dependent claim 41, Greenblatt taught the predefined criteria includes at least one condition (Figure 6).

Regarding claim 42, Greenblatt taught an apparatus for monitoring information on a network (col. 4, lines 8-11), comprising:

a storage device storing a predefined criterion (rule table 34), and having a monitoring module thereon (rule processor 37); and

a processing device executing the monitoring module to transmit at least one instruction to the network, the at least one instruction being executed on the network and requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operation (col. 6, lines 8-18),

wherein the information includes at least one event and at least one condition, and wherein the predefined criterion is a rule-based criterion which enables the monitoring operation to monitor for the at least one event on the network and to check if

a certain condition of the at least one condition is satisfied (Figure 6 and col. 13, line 48-col. 15, lines 61).

Regarding dependent claim 43, Greenblatt taught the rule-based criterion includes:

at least one of a WHEN portion and an IF portion, and a THEN portion (rule table of Figure 6), and

wherein the THEN portion includes a probing action which has at least one probing operator (col. 15, lines 5-27).

Regarding dependent claim 50, Greenblatt taught the monitoring operation is performed on a client station (col. 11, lines 43-53).

Regarding dependent claim 51, Greenblatt taught the processing device performs the monitoring operation (col. 12, lines 57-62, col. 13, lines 10-19).

Regarding claim 52, Greenblatt taught an apparatus for monitoring information on a network (col. 4, lines 8-11), comprising:

a storage device storing a predefined criterion (rule table 34), and having a monitoring module thereon (rule processor 37); and

a processing device executing the monitoring module to transmit at least one instruction to the network, the at least one instruction being executed on the network and requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (col. 6, lines 8-18)

wherein the at least one result includes a copy of at least one monitored predicate (col. 10, lines 36-44).

Regarding claim 53, Greenblatt taught an apparatus for monitoring information on a network (col. 4, lines 8-11), comprising:

a storage device storing a predefined criterion (rule table 34), and having a monitoring module thereon (rule processor 37); and

a processing device executing the monitoring module to transmit at least one instruction to the network, the at least one instruction being executed on the network and requesting a performance of a monitoring operation to monitor the information on the network as a function of the predetermined criterion, the processing device is adapted to receive data from the network based on at least one result of the monitoring operations (col. 6, lines 8-18)

wherein the at least one result includes a copy of a portion of at least one monitored predicate (col. 10, lines 36-44).

Regarding dependent claim 54, Greenblatt taught the monitoring operation is performed by exploring particular data on client sites which are connected to the network (col. 5, lines 26-31).

Regarding dependent claim 55, Greenblatt taught an atomic condition, and a combination of atomic conditions (rule table of Figure 6).

Regarding dependent claim 56, Greenblatt taught the at least one event is one of an instantaneous event and an event which extends over a period of time (col. 3, lines 45-50).

Regarding dependent claim 57, Greenblatt taught the WHEN portion is used to monitor for an occurrence of at least one event (col. 7, line 31-40).

2. The language of claims 58-59, 61-63, 70-77 is substantially the same as previously rejected claims 38-39, 41-43, 50-57. Therefore, claims 58-59, 61-63, 70-77 are rejected on the same rationale as previously rejected claims 38-39, 41-43, 50-57.

Regarding claim 78, Greenblatt taught an apparatus for monitoring information on a network (col. 4, lines 8-11), comprising:

a storage device storing a predefined criterion (rule table 34), and having a monitoring module thereon (rule processor 37); and

a processing device executing the monitoring module to transmit at least one instruction to the network, the at least one instruction being performed on the network and requesting a performance of a particular operation to continuously monitor the information on the network as a function of the predetermined criterion (col. 6, lines 8-18), the processing device is adapted to receive data from the network based on at least one result of the particular operation (col. 10, lines 36-44).

Regarding dependent claim 79, Greenblatt taught the at least one result is obtained when at least one condition is satisfied (col. 15, lines 15-27).

Regarding claim 80, Greenblatt taught a method for monitoring information on a network (col. 4, lines 8-11), comprising:

receiving a predefined criterion (col. 13, lines 48-62);

continuously monitoring the information on the network as a function of the predefined criterion, wherein the monitoring step being performed by executing at least one instruction on the network (col. 15, lines 5-27); and

receiving data from the network based on at least one result of the monitoring step (col. 15, lines 42-52).

Regarding dependent claim 81, Greenblatt taught further comprising the step of:

obtaining the at least one result when at least one condition is satisfied (col. 15, lines 15-27).

Regarding claim 82, Greenblatt taught an apparatus for monitoring information on a network (col. 4, lines 8-11), comprising:

a storage device storing a predefined criterion (rule table 34), and having a monitoring module thereon (rule processor 37); and

a processing device executing the monitoring module to transmit at least one instruction to the network, the at least one instruction being performed on the network and requesting a performance of a particular operation to regularly monitor the information on the network as a function of the predetermined criterion (col. 6, lines 8-18), the processing device is adapted to receive data from the network based on at least one result of the particular operation (col. 10, lines 36-44).

Regarding claim 83, Greenblatt taught a method for monitoring information on a network (col. 4, lines 8-11), comprising:

receiving a predefined criterion (col. 13, lines 48-62);

regularly monitoring the information on the network as a function of the predefined criterion, wherein the monitoring step being performed by executing at one instruction on the network (col. 15, lines 5-27); and

receiving data from the network based on at least one result of the monitoring step (col. 15, lines 42-52).

Regarding dependent claims 84 and 85, Greenblatt taught the at least one event is detected on the network (col. 7, lines 31-40).

Regarding claim 86, Greenblatt taught a software arrangement for monitoring information on a network which is capable of being executed by a processor, comprising:

a program which, when executed by the processor, is capable of performing the following steps:

a) receiving a predefined criterion (col. 14, lines 28-36),

b) transmitting at least one instruction to the network (launching data probe, col. 14, lines 49-55),

c) monitoring the information on the network as a function of the predefined criterion, wherein the monitoring step being performed by executing the at least one instruction on the network (col. 15, lines 1-20), and

d) receiving data from the network based on at least one result of the monitoring step (col. 15, lines 42-48).

Regarding dependent claims 87 and 88, Greenblatt taught the at least one event detects changes on the network (col. 10, lines 36-44).

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code 103 not included in this action can be found in a prior Office action.

4. Claims 44 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenblatt in view of Chadha et al., U.S. Patent No. 6,134,555 (hereafter referred to as Chadha).

Regarding dependent claims 44 and 64, Greenblatt taught a probing operator (probes 16, 18, col. 5, lines 15-19). However, Greenblatt does not specifically teach the probing operator includes a data mining query. Chadha taught a data mining query (col. 4, lines 4-28). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Chadha's data mining query in Greenblatt's probing operator would have improved system effectiveness. The motivation would have been glean more interesting information from the data collected in Greenblatt's data monitoring system.

Claims 45-47 and 65-67are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenblatt in view of Hunt et al., U.S. Patent No. 5,893,091 (hereafter referred to as Hunt).

Regarding dependent claim 45, Greenblatt does not specifically teach the an IF portion. However, Hunt taught an IF portion includes the at least one condition is complex (col. 10, lines 34-39).

Regarding dependent claim 46, Hunt taught the at least one complex condition includes at least one of:

an atomic condition (single keyword), and a combination of atomic conditions (combination of keywords, col. 10, lines 43-48).

Regarding dependent claim 47, Hunt taught the atomic condition includes at least one literal portion (defined with Boolean operators, col. 13, lines 25-30).

As to claims 45-47, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Hunt Boolean conditions in Greenblatt's monitoring system would have improved system effectiveness. The motivation would have been to enable monitoring for more complex and interdependent events.

5. The language of claims 65-67 is substantially the same as previously rejected claims 45-47. Therefore, claims 65-67 are rejected on the same rationale as previously rejected claims 45-47.

Claims 48-49 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenblatt and Hunt in view of A. Prasad Sistla et al., Temporal Conditions and Integrity Constraints in Active Database Systems (hereafter referred to as Sistla).

Regarding dependent claim 48, Greenblatt-Hunt does not specifically teach the atomic condition includes at least one binary past temporal operator. However, Sistla taught an atomic condition includes at least one binary past temporal operator (page 4,

Section 4.1, paragraph 1).

Regarding dependent claim 49, Greenblatt-Hunt does not specifically teach the atomic condition includes at least one unary past temporal operator. However, Sistla taught atomic condition includes at least one unary past temporal operator (page 4, Section 4.1, paragraph 1).

As to claims 48-49, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Sistla's Past Temporal Logic in Greenblatt's monitoring system would have improved the monitoring system's effectiveness by incorporating more flexible monitoring criterion. The motivation would have been because Past Temporal Logic can be combined with any query language and proves improved condition-action statements used in active monitoring.

The language of claims 68-69 is substantially the same as previously rejected claims 48-49. Therefore, claims 68-69 are rejected on the same rationale as previously rejected claims 48-49.

Response to Arguments

6. Applicant argues – "... Greenblatt ... does not teach or suggest, much less disclose that such instruction is executed on the network, especially so as to request the performance of the monitoring operation to monitor information on the network ..."

a. Monitoring to collect of data samples, col. 11, lines 21-26, which are of network traffic, col. 11, lines 48-53. Thus, monitor information on a network.

7. Applicant argues – "... Greenblatt ... does not teach or suggest ... the data received from the network based on at least one result of the monitoring operation ..."

b. Data collected records (i.e. provides a copy) results of the monitored predicate, col. 6, lines 45-50.

8. Applicant argues – "... Greenblatt ... does not monitor both the event and the condition ..."

c. Greenblatt taught events composed of rule statements including conditions, col. 3, lines 39-44. Thus, Greenblatt monitors for both simultaneously.

9. Applicant argues – " ... Greenblatt ... does not provide any result that includes a copy of a portion of the monitored predicate ..."

d. Data collected records (i.e. provides a copy) results of the monitored predicate, col. 6, lines 45-50.

10. Applicant argues – "Applicant's respectfully assert that this recited probing action cannot be equated to the parameters of the "SELECT" clause of the SQL query of the Greenblatt patent ... However, Applicants' claimed 'probing' operation can be equated to "an exploratory investigation".

e. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a probing operator with additional functions and features that are not claimed but used in applicant's arguments) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

11. Applicant argues – "... [T]here is absolutely no teaching or suggestion in these portions of the Chadha Patent or any section thereof of the probing operator that includes a data mining query."

f. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

12. Applicant argues – "The Greenblatt patent provides absolutely no teaching, suggestion, motivation or incentive to utilize data mining techniques in its monitoring system."

g. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

13. Applicant argues – "... [T]he literal portion recited in these claims is a term of art of logic programming and databases (e.g. a relation in a relational database, or a predicate or a negation of a predicate in a logic program), and not mere data."

h. Greenblatt taught the identified predicate is the a particular condition (col. 6, lines 45-50. Hunt taught a particular condition as evidenced by the Boolean operators. Thus, using Greenblatt definitions as a teaching Hunt taught predicates.

14. Applicant argues – "...[T]he examiner believes that the Greenblatt Patent discloses an atomic condition and a combination of atomic conditions in the rule table of Fig. 6. However, the Examiner does not point to any portion of the Greenblatt Patent to disclose that the event includes an atomic event and/or a combination of atomic events."

i. Atomic event and/or combination of atomic events, col. 12, lines 63-67.

15. Applicant argues – "...[T]he Greenblatt Patent does not teach or suggest, much less disclose that the events are detected on the network ..."

j. Detected on from network samples, col. 11, lines 43-53.

Conclusion

16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is (703) 305-3938. The examiner can normally be reached on Monday-Friday from 10:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached on (703) 305-9648. The fax phone number(s) for this Group are after final (703) 746-7238; official (703) 746-7239 and non-official/draft (703) 746-7240.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Patrice Winder

PATRICE WINDER
PRIMARY EXAMINER